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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,904	06/20/2003	Robert Sigurd Nelson		9224

7590 01/24/2006
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2922 Upshur Street
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EXAMINER

KIKNADZE, IRAKLI

ART UNIT PAPER NUMBER

2882

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/600,904

Applicant(s)

NELSON ET AL.

Examiner

Irakli Kiknadze

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 57-59 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 59 is/are allowed.
- 6) ☒ Claim(s) 57 and 58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In response to the Office action dated September 9, 2006 the Amendment has been received on October 12, 2005.

Claims 57-59 are currently pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 57 is rejected under 35 U.S.C. 102(b) as being anticipated by Dobbs et al. (US Patent 5,444,752).

With respect to claim 57, Dobbs teaches a method of calibrating a radiation detection system (14) comprising: providing an X-ray radiation source (12) (column 4, lines 30-33), measuring the level of radiation emitted from the source that is detected by the detection system (14) (column 6, lines 59-61), and calibrating the detection system

(14) by evaluating the detected radiation and balancing the system based upon the detected radiation (column 6, lines 64-68).

4. Claim 57 is rejected under 35 U.S.C. 102(e) as being anticipated by Spitz et al. (US Patent 6,362,471 B1).

With respect to claim 57, Spitz teaches a method of calibrating a radiation detection system comprising (column 12, lines 59-61): providing a radiation source (12), measuring the level of radiation emitted from the source (12) that is detected by the detection system (16) (see abstract, lines 1-4), and calibrating the detection system by evaluating the detected radiation and balancing the system based upon the detected radiation (see claim 1; column 13, lines 9-15).

5. Claims 57 and 58 are rejected under 35 U.S.C. 102(e) as being anticipated by Kump et al. (US Patent 6,460,003 B1).

With respect to claim 57, Kump teaches a method of calibrating a radiation detection system comprising (see abstract): providing a radiation source (114), measuring the level of radiation emitted from the source (114) that is detected by the detection system (114) (column 3, lines 10-14 and 20-24), and calibrating the detection system by evaluating the detected radiation and balancing the system based upon the detected radiation (see Fig. 2; column 6, line 63 – column 7, line 8).

With respect to claim 58, Walters teaches measuring an energy-dependent modulation transfer function of the detection system, and calibrating the system by accounting for both the detected radiation and the energy-dependent modulation

transfer function (see abstract; column 3, lines 54-59 and column 6, line 63 – column 7, line 8).

Allowable Subject Matter

6. Claim 59 is allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

With respect to claim 59 the prior art fails to teach or make obvious a method of estimating the effects of tissue attenuation on the intensity and energy distribution of an X-ray beam comprising: measuring a first position-dependent, energy-dependent intensity profile of the X-ray beam at a detector array, transmitting the x-ray beam through a patient, measuring a second position-dependent, energy-dependent intensity profile of the X-ray beam at the detector array immediately after the beam has been transmitted through the patient; and comparing the first and the second position-dependent, energy-dependent intensity profiles of the beam as claimed in combination with all elements of claim 59.

Response to Arguments

8. Applicant's arguments, see pages 1-3, filed October 12, 2005, with respect to claims 57-59 have been fully considered and are persuasive. However, upon further

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consideration, with respect to claims 57 and 58, a new ground(s) of rejection is made in view of Dobbs et al. (US Patent 5,444,752), Spitz et al. (US Patent 6,362,471 B1) and Kump et al. (US Patent 6,460,003 B1).

The rejection of claim 59 has been withdrawn.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irakli Kiknadze whose telephone number is 571-272-2493. The examiner can normally be reached on 9:00- 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on 571-272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Irakli Kiknadze
January 20, 2006



EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER